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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/879,469	06/12/2001	Todd J. Gable	IL-10789	4354

24981 7590 04/25/2005

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA  
LAWRENCE LIVERMORE NATIONAL LABORATORY  
PO BOX 808, L-703  
LIVERMORE, CA 94551-0808

EXAMINER
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OPSASNICK, MICHAEL N

ART UNIT	PAPER NUMBER
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2655

DATE MAILED: 04/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/879,469	<b>Applicant(s)</b> GABLE ET AL.	
	<b>Examiner</b> Michael N. Opsasnick	<b>Art Unit</b> 2655	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 June 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-45 is/are allowed.
- 6) ☒ Claim(s) 46-50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>9/4/01; 5/30/02</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Objections***

2. Claim 50 is objected to because of the following informalities: the phrase “the non-consecutive two-glottal cycle” should read “a non-consecutive two-glottal cycle”. Appropriate correction is required.

### ***Allowable Subject Matter***

3. Claims 1-45 are allowable over the prior art of record.
4. The following is a statement of reasons for the indication of allowable subject matter:

As per independent claims 1,16, and 31, the recited claim language pertaining to generating speech feature vectors include a non-acoustic parameters and a non-acoustic glottal shape parameter, is not explicitly taught by the prior art of record.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 46-50 are rejected under 35 U.S.C. 102(e) as being anticipated by

Chengalvarayan et al (6055499).

As per claim 46, Chengalvarayan et al (6055499) teaches a method for speech characterization comprising collecting a plurality of data from a speaker (as collecting data from multiple speakers → col. 5 lines 22-33);

“using the plurality of data.....tissues” as generating multiple baseline vectors (col. 5 lines 49-57), from which periodicity and jitter are calculated (col. 5 lines 57-66), wherein jitter is defined as the measure of fluctuation in glottal cycle lengths (col. 2 lines 54-56);

“generating....parameters” as generating multiple baseline vector parameters (col. 5 lines 49-57).

As per claim 47, Chengalvarayan et al (6055499) teaches:

“wherein creating.....by the speaker” as training set uses multiple repetition (col. 5 lines 30-47).

As per claims 48,49, Chengalvarayan et al (6055499) teaches averaging the jitter function (col. 4 lines 13-17), which is a function of the glottis measurement (col. 2 lines 54-56).

As per claim 50, Chengalvarayan et al (6055499) teaches the jitter function using the previous frame data (n-1) as well as the future frame data (n+1) (col. 4 lines 15-25).

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please see related art listed on the PTO-892 form. Furthermore, Holzrichter et al (5729694) discloses measurement of glottal functions.

8. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 872 9314,

(for informal or draft communications, please label "PROPOSED" or "DRAFT")

Art Unit: 2655

Hand-delivered responses should be brought to Crystal Park II, 2121  
Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Opsasnick, telephone number (571)272-7623, who is available Tuesday-Thursday, 9am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To, can be reached at (703)305-4827. The facsimile phone number for this group is (571)272-7629.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 2600 receptionist whose telephone number is (703) 305-4750, the 2600 Customer Service telephone number is (703) 306-0377.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mno  
4/14/05



**VIJAY CHAWAN  
PRIMARY EXAMINER**